

Installing NWTC Design Codes on PCs Running Windows NT®

by

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Introduction

Installing and running console applications such as the National Wind Technology Center (NWTC) design codes is different than it is for normal 32-bit Windows applications. Usually, you will want to install our codes in such a way that they will run from a command window and from any folder.

This short paper will guide you through the installation of our codes for the Windows NT® operating system. We will assume the code being installed is Crunch, but these instructions should work for any of the other codes we distribute.

Retrieving Files from the Archives

You should download the archive of a code from our web server page <http://wind2.nrel.gov/designcodes/>. The archive file should have a name such as "Crunch_v233.exe." Create a folder called Crunch somewhere on your file system and put this file there. For this example, we will assume the folder's name is "C:\Crunch." You can double click on the file from Windows Explorer or by entering "Crunch_v233" at a command prompt with the Crunch folder as the current directory. This will create some files and folders. Included in the Crunch folder will be a file called "Crunch.exe." This is the executable file for Crunch.

Setting Up a Folder for Batch Files

This is something you need to do only once. After you've done it for one of our codes, you will not need to do it for other codes.

Create a folder somewhere in your file system. I will use "C:\Batch" in this tutorial. Now, add the folder to your search path; you must have Administrator privileges on your PC to do this. In Windows NT, you click on Start, Settings, then Control Panel. Double-clicking on the System file or icon will bring up the

System Properties window. Click on the Environment tab.

This tab will have two list boxes; one is for System Variables and one is for User Variables. Select "Path" from the System Variables list.

The word "Path" will show up in the Variable box near the bottom of the window and the current search path will be below it in the Value box. Enter "C:\Batch;" to the beginning of the path in the value box. Do not forget to put in the semicolon separator. Click the OK button at the bottom of the window to put the change into effect.

The change you just made will be permanent and will apply to any new command windows you open. You do not need to reboot your PC. The search paths for windows that were already open when you make the change will not be updated, so you cannot use them to run the code.

To do this with Windows 9x or Windows Me®, you probably need to edit the PATH statement in C:\autoexec.bat, but I am not positive. You will probably need to reboot your computer to put the new path into effect. I suspect that doing this for Windows 2000® will be more like what I described for Windows NT.

Creating a Batch File

The next step is to create a batch file to invoke the code. Using a plain-text editor, create a file called "Crunch.bat" in the "C:\Batch" folder. You need only one line in the batch file. It should look something like:

```
C:\Crunch\Crunch.exe %1 %2
```

This tells the operating system to find an executable file named "Crunch.exe" in the "C:\Crunch" folder. The "%1 %2" tells the batch file to pass the first two command-line arguments to "Crunch.exe." To get an idea of how many command-line arguments you need to

pass to Crunch, enter “Crunch /h” at a command prompt. That will give you the syntax for the command. You will see that Crunch will accept no more than two arguments. Some codes will use fewer, some more.

Invoking the Code

To run a code, open a command window and set the folder to one where you have your user-created files. *It is inadvisable to do your work in the design-code folders.* To start the code, enter:

Crunch <input_file>

That’s all there is to it. Happy computing!

Caveats

NREL makes no promises about the usability or accuracy of this tutorial.

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Feedback

If you have comments about this tutorial, please contact Marshall Buhl. If he has time to respond to your needs, he will do so, but please do not expect an immediate response. Please send your comments to:

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